UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,104	10/31/2003	Deia Salah-Eldin Bayoumi	ABDT-0576/B030280	1874

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EXAMINER
JARRETT, RYAN A

ART UNIT	PAPER NUMBER
2125	

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/699,104	BAYOUMI ET AL.
	Examiner	Art Unit	
	Ryan A. Jarrett	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 December 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>21-36</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>21-36</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 12/22/05 have been fully considered but they are not persuasive. Applicant argues that four of the steps of the claimed methods are not shown or suggested by the Schleiss et al. application.

Regarding step **1.** argued by the Applicant, the process control system 36 was cited as merely one example of the design store or design data server. Additionally, the production scheduling system 48 can be considered a design data store since the system operator uses the production scheduling system 48 to schedule or create a batch campaign. Once the batch campaign is created, the production scheduling system 48 wraps the campaign information (e.g., batch ID, recipe, number of batches required, etc.) in an appropriate XML schema (see [0050]). In this case, the "batch ID, recipe, number of batches require, etc." constitute the claimed "design data".

Regarding step **2.**, Examiner maintains that the cited passages anticipate this step. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant's arguments further do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Applicant has failed to show how the claimed method steps distinguish over the

disclosed "ORDER PROCESSING" and "PRODUCTION SCHEDULING" of Schleiss et

al. The "ORDER PROCESSING" of Schleiss et al. corresponds to the claimed

"producing a list of [products] that need to be manufactured". And the "PRODUCTION

SCHEDULING" of Schleiss et al. corresponds to the claimed "selecting from said list a

particular [product] that needs to be manufactured".

Regarding step **3.**, it is noted that the entire "crux" of the Schleiss et al. invention

is directed towards this feature, as further evidenced by the abstract and [0009]-[0014].

Schleiss et al. discloses a transactional data communications system and method

communicates information within an enterprise having a process control system and a

plurality of information technology systems that are communicatively coupled to the

process control system via a web services interface and a transactional information

server. The system and method generates transactional process control information

and formats the transactional process control information based on an extensible

markup language input schema to form formatted transactional process control

information. The system and method sends the formatted transactional process control

information to the transactional information server via the web services interface and

maps the formatted transactional process control information to an extensible markup

language output schema associated with one of the plurality of information technology

systems to form mapped transactional process control information. The system and

method then sends the mapped transactional process control information to the one of

the plurality of information technology systems.

Thus, the "transactional process control information" of Schleiss et al. corresponds to the claimed "real-time information" and the "formatted" and "mapped transactional process control information" associated with one of the plurality of information technology systems of Schleiss et al. corresponds to the claimed updated "transactional data".

Regarding step **4.**, Examiner maintains that the cited sections of Schleiss et al. anticipate "determining from said retrieved information whether said facility can manufacture said particular [product]". The "PRODUCTION SCHEDULING" system 48 schedules products to be produced at the different facilities. This constitutes "determining...whether said facility can manufacture said particular [product]". If the facility were not capable, then the system would not schedule products to be produced there. And in order for products to be scheduled for production, the parts and inventory that are used to produce these products must be known and made available. This corresponds to the "PRODUCT INVENTORY CONTROL" and "PROCUREMENT" data retrieved from the databases of Schleiss et al.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 21-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schleiss et al. US 2003/0014500 in view of Montminy et al. US 5946210.

Regarding claims 21-23, 25, 28-31, 33, and 36, Schleiss et al. discloses:

21.   A method for controlling at least one machine operable to manufacture products, said method comprising the steps of:

providing a store of transactional data relating to products (e.g., Fig. 1 #30-48);

providing a store of design data for products (e.g., Fig. 1 #36, Fig. 1 #48: "PRODUCTION SHCEDULING", [0050]: "[A] system operator uses the production scheduling system 48 to schedule or create a batch campaign. Once the batch campaign is crated, the production scheduling system 48 wraps the campaign information (e.g., batch ID, recipe, number of batches required, etc.) in an appropriate XML schema");

retrieving information from said store of transactional data (e.g., Fig. 1 #30, #38, #44, and #48, [0004]-[0006]);

producing a list of products that need to be manufactured based on said information retrieved from said stored of transactional data (e.g., Fig. 1 #30: "ORDER PROCESSING", [0004]-[0006]);

selecting from said list a particular product that needs to be manufactured by said at least one machine (e.g., Fig. 1 #48: "PRODUCTION SCHEDULING", [0004]-[0006]);

retrieving design data for said particular product from said store of design data (e.g., [0050]: "batch ID, recipe, number of batches required");

using said design data to generate control data for controlling said at least one machine to manufacture said particular product (e.g., [0050]);

transmitting said control data to said at least one machine (e.g., [0025], [0026], [0050]);

receiving real-time information concerning the manufacture of said particular [electrical device] *product* from said at least one machine (e.g., abstract, [0006], [0009]-[0014], [0023], [0035], [0038], [0054]); and

updating said store of transactional data to reflect said received real-time information ([e.g., abstract, [0006], [0009]-[0014], [0023], [0035], [0038], [0054]).

22.   The method of claim 21 further comprising:

transmitting order information for products over a network (e.g., Fig. 1 #30); and updating said store of transactional data (e.g., Fig. 1 #38, [0023]) using said transmitted order information.

23.   The method of claim 22 wherein said transmitting of said order information is over the Internet (e.g., Fig. 1 #28).

25.   The method of claim 21, wherein said information retrieved from said store of transactional data includes data relating to scheduling of multiple processes for manufacturing said particular product (e.g., Fig. 1 #48).

28.   The method of claim 21, wherein said real-time information received from said at least one machine includes completion of an intermediary component of said particular electrical device or the end of a process in the manufacture of said intermediary component ([e.g., [0006], [0023], [0035], [0038], [0054]).

29.   The method of claim 21, wherein said at least one machine comprises a plurality of machines (e.g., [0025], [0026]).

30.   A method for manufacturing products in a facility, said method comprising:

providing at least one machine operable to manufacture products (e.g., [0002], [0025], [0026]);

providing an order server (e.g., Fig. 1 #30) connected by a network to a data exchange

server (e.g., Fig. 1 #52);

providing an enterprise resource planning (ERP) server for storing and providing access

to transactional data relating to products (e.g., Fig. 1 #30-48), said ERP server being connected

to said data exchange server (e.g., Fig. 1 #52);

providing a design data server for storing and providing access to design data for

products (e.g., Fig. 1 #36, Fig. 1 #48: "PRODUCTION SHCEDULING", [0050]: "[A] system

operator uses the production scheduling system 48 to schedule or create a batch campaign.

Once the batch campaign is crated, the production scheduling system 48 wraps the campaign

information (e.g., batch ID, recipe, number of batches required, etc.) in an appropriate XML

schema");

receiving an order for a particular product in said order server (e.g., Fig. 1 #30: "ORDER

PROCESSING");

transmitting said order over said network to said data exchange server (e.g., Fig. 1 #30);

retrieving information from said ERP server (e.g., Fig. 1 #38: "PRODUCT INVENTORY

CONTROL", #44: "PROCUREMENT", and #48: "PRODUCTION SCHEDULING", [0004]-[0006]);

determining from said retrieved information (e.g., Fig. 1 #38: "PRODUCT INVENTORY

CONTROL", #44: "PROCUREMENT", and #48: "PRODUCTION SCHEDULING", [0004]-[0006])

whether said facility (e.g., Fig. 1 #14, #16, #22) can manufacture said particular product;

if said facility can manufacture said particular product, retrieving design data for said

particular product from said design data server (e.g., [0050]: "batch ID, recipe, number of

batches required");

using said design data to generate control data for controlling said at least one machine

to manufacture said particular product (e.g., [0050]); and

transmitting said control data to said at least one machine e.g., ([0025], [0026], [0050]).

31.   The method of claim 30, wherein said transmitting of said order over said network includes transmitting said information over the Internet (e.g., Fig. 1 #28).

33.   The method of claim 30, wherein said information retrieved from said ERP server includes data relating to scheduling of multiple processes for manufacturing said particular product (e.g., Fig. 1 #48).

36.   The method of claim 30, further comprising:

receiving real-time information concerning the manufacture of said particular product from said at least one machine (e.g., abstract, [0006], [0009]-[0014], [0023], [0035], [0038], [0054]); and

updating said transactional data in said ERP server to reflect said received real-time information ([e.g., abstract, [0006], [0009]-[0014], [0023], [0035], [0038], [0054]).

Regarding claims 24, 26, 27, 32, 34, and 35, Schleiss et al. discloses a process control system for manufacturing products. According to Schleiss et al., the process control system is like those used in "chemical, petroleum, or other processes" (e.g., [0002]).

Schleiss et al. does not specifically disclose that one of these "other processes" is a process for manufacturing electrical devices, or more specifically that the electrical devices are electrical transformers; wherein the information retrieved from said store of transactional data includes data relating to scheduling of winding, tank fabrication and processing; wherein the design data comprises electronic drawings.

However, it is well known that process control systems are commonly used to control the manufacture of electrical devices, such as semiconductor electronic devices. Moreover, Montminy discloses an automated system for configuring power converters, i.e. transformers; further comprising retrieving from a store of transactional data information relating to scheduling of winding, tank fabrication and processing (e.g., col. 2 line 32 – col. 5 line 64, col. 10 line 45 – col. 11 line 32); further comprising retrieving electronic drawing data from a store of design data (e.g., col. 2 lines 16-30).

Schleiss et al. and Montminy are analogous art since they both disclose transactional systems that are used to store information relating to the ordering, inventory, scheduling, designing, and manufacturing of products.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the system of Schleiss et al., which integrates transactional and real-time manufacturing information, to the transformer configuration system of Montminy et al. since Montminy et al. discloses that a transactional ordering system can be advantageously used by a customer to specify functional and physical requirements and selection criteria of a desired transformer. A transformer design and bill of materials generator in turn provides the user with a transformer configuration that meets the customer's needs and is optimized with respect to the specified selection criteria. Also, the transformer generator provides the customer with power converter configurations in "real-time", and through access to component availability and manufacturing scheduling data, the converter generator provides the user with accurate configuration availability dates (e.g., col. 5 lines 20-45).
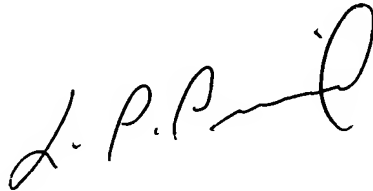
Conclusion

4.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-

3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan A. Jarrett
Examiner
Art Unit 2125

1/9/06
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